

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor: Raymond J. Cho, et al.

Serial Number: 10/802,615

Filing Date: March 16, 2004

Title: METHOD AND SYSTEM FOR
PERFORMING INFORMATION
EXTRACTION AND QUALITY
CONTROL FOR A KNOWLEDGEBASE

Group Art Unit: 2167

Examiner: Susan F. Rayyan

CONFIRMATION NO: 4568

Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

ELECTRONICALLY FILED ON: FEBRUARY 14, 2007

INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §1.97

Sir:

Applicant(s) hereby submit(s) an Information Disclosure Statement along with attached form(s) PTO/SB/08. A copy of each listed publication is submitted, if required, pursuant to 37 CFR §§1.97-1.98, as indicated below.

Applicant(s) respectfully request(s) that the listed information be considered by the Examiner and be made of record in the above-identified application. Applicant(s) further request(s) that the Examiner initial and return the attached form(s) PTO/SB/08 in accordance with MPEP §609.

Applicant(s) reserve(s) the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement is not intended to represent that a search has been made or that the information cited in the statement is, or is considered to be, prior art or material to patentability as defined in §1.56.

- A. ☐ 37 CFR §1.97(b). This Information Disclosure Statement should be considered by the Office because:
- ☐ (1) It is being filed within 3 months of the filing date of a national application and is other than a continued prosecution application under §1.53(d);
-- OR --
 - ☐ (2) It is being filed within 3 months of entry of the national stage as set forth in §1.491 in an international application;
-- OR --
 - ☐ (3) It is being filed before the mailing of a first Office action on the merits;
-- OR --
 - ☐ (4) It is being filed before the mailing of a first Office action after the filing of a request for continued examination under §1.114.
- B. ☒ 37 CFR §1.97(c). Although this Information Disclosure Statement is being filed after the period specified in 37 CFR §1.97(b), above, it is filed before the mailing date of the earlier of (1) a final office action under §1.113, (2) a notice of allowance under §1.311, or (3) an action that otherwise closes prosecution on the merits, this Information Disclosure Statement should be considered because it is accompanied by one of:
- ☐ a statement as specified in §1.97(c) provided concurrently herewith;
-- OR --
 - ☒ a fee of \$180.00 as set forth in §1.17(p) authorized below, enclosed, or included with the payment of other papers filed together with this statement.
- C. ☐ 37 CFR §1.97(d). Although this Information Disclosure Statement is being filed after the mailing date of the earlier of (1) a final office action under §1.113 or (2) a notice of allowance under §1.311, it is being filed before payment of the issue fee and should be considered because it is accompanied by:
- i. a statement as specified in §1.97(e);
-- AND --
 - ii. a fee of \$180.00 as set forth in §1.17(p) is authorized below, enclosed, or included with the payment of other papers filed together with this Statement.
- D. ☐ 37 CFR §1.97(e). Statement.
- ☐ A statement is provided herewith to satisfy the requirement under 37 CFR §§1.97(c);
-- AND/OR --
 - ☐ A statement is provided herewith to satisfy the requirement under 37 CFR §§1.97(d);
-- AND/OR --
 - ☐ A copy of a dated communication from a foreign patent office clearly showing that the information disclosure statement is being submitted within 3 months of the filing date on the communication is provided in lieu of a statement under 37 C.F.R. § 1.97(e)(1) as provided for under MPEP 609.04(b) V.
- E. ☐ Statement Under 37 C.F.R. §1.704(d). Each item of information contained in the information disclosure statement was first cited in a communication from a foreign patent office in a counterpart application that was received by an individual designated in § 1.56(c) not more than thirty (30) days prior to the filing of this information disclosure statement. This statement is made pursuant to the

requirements of 37 C.F.R. §1.704(d) to avoid reduction of the period of adjustment of the patent term for Applicant(s) delay.

- F. ☒ 37 CFR §1.98(a)(2). The content of the Information Disclosure Statement is as follows:

☐ Copies of each of the references listed on the attached Form PTO/SB/08 are enclosed herewith.

-- OR --

☒ Copies of U.S. Patent Documents (issued patents and patent publications) listed on the attached Form PTO/SB/08 are NOT enclosed.

-- AND/OR --

☒ Copies of Foreign Patent Documents and/or Non Patent Literature Documents listed on the attached Form PTO/SB/08 are enclosed in accordance with 37 CFR §1.98 (a)(2).

-- AND/OR --

☐ Copies of pending unpublished U.S. patent applications are enclosed in accordance with 37 CFR §1.98(a)(2)(iii).

- G. ☐ 37 CFR §1.98(a)(3). The Information Disclosure Statement includes non-English patents and/or references.

☐ Pursuant to 37 CFR §1.98(a)(3)(i), a concise explanation of the relevance of each patent, publication or other information provided that is not in English is provided herewith.

☐ Pursuant to MPEP 609(B), an English language copy of a foreign search report is submitted herewith to satisfy the requirement for a concise explanation where non-English language information is cited in the search report.

-- OR --

☐ A concise explanation of the relevance of each patent, publication or other information provided that is not in English is as follows: _____

☐ Pursuant to 37 CFR §1.98(a)(3)(ii), a copy of a translation, or a portion thereof, of the non-English language reference(s) is provided herewith.

- H. ☐ 37 CFR §1.98(d). Copies of patents, publications and pending U.S. patent applications, or other information specified in 37 C.F.R. § 1.98(a) are not provided herewith because:

☐ Pursuant to 37 CFR §1.98(d)(1) the information was previously submitted in an Information Disclosure Statement for another application under which this application claims priority for an earlier effective filing date under 35 U.S.C. 120.

Application in which the information was submitted: _____

Information Disclosure Statement(s) filed on: _____

AND

☐ The information disclosure statement submitted in the earlier application complied with paragraphs (a) through (c) of 37 CFR §1.98.

- I. ☒ *Fee Authorization.* The Commissioner is hereby authorized to charge the above-referenced fees of \$180.00 and charge any additional fees or credit any overpayment associated with this communication to Deposit Account No. 23-2415 (Docket No. 27763-703.301).

Respectfully submitted,

WILSON SONSINI GOODRICH & ROSATI

Dated: February 14, 2007

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By: 

Anie K. Roche, Registration No. 50,512

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Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)				Application Number	10/802,615
				Filing Date	March 16, 2004
				First Named Inventor	Raymond J. Cho
				Art Unit	2167
				Examiner Name	Susan F. Rayyan
Sheet	1	Of	2	Attorney Docket Number	27763-703.301

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1.	US 2004/0220969	11/4/2004	Cho et al.	
	2.	US 2005/0044071	2/24/2005	Cho et al.	
	3.	US 5,371,807	12/6/1994	Register et al.	
	4.	US 5,377,103	12/27/1994	Lamberti et al.	
	5.	US 5,794,050	8/11/1998	Dahlgren et al.	
	6.	US 5,963,966	10/5/1999	Mitchell et al.	
	7.	US 6,023,659	2/8/2000	Seilhamer et al.	
	8.	US 6,038,560	3/14/2000	Wical	
	9.	US 6,052,714	4/18/2000	Miike et al.	
	10.	US 6,067,548	5/23/2000	Cheng	
	11.	US 6,101,488	8/8/2000	Hayashi et al.	
	12.	US 6,154,737	11/28/2000	Inaba et al.	
	13.	US 6,292,796	9/18/2001	Drucker et al.	
	14.	US 6,308,170	10/23/2001	Balaban	
	15.	US 6,370,542 B1	4/9/2002	Kenyon	
	16.	US 6,424,980	7/23/2002	Iizuka et al.	
	17.	US 6,442,566 B1	8/27/2002	Atman et al.	
	18.	US 6,487,545 B1	11/26/2002	Wical	
	19.	US 6,741,986	5/25/2004	Cho et al.	
	20.	US 6,772,160	8/3/2004	Cho et al.	

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
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Examiner Signature	Date Considered
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*EXAMINER: Initial of reference considered, whether or not citation is in conformance with MPEP 909. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. *Applicant's unique citation designation number (optional). *See Kind Code of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. *Issue Office that issued the document, by the two-letter code (WIPO Standard ST 3). *For separate patent documents, the indication of the year of the reg. of the foreign must precede the serial number of the patent document. *Kind of document by the appropriate symbol as indicated on the document under WIPO Standard ST 34 if possible. *Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.99. The information is required to obtain or retain a benefit by the public which is in the (and by the USPTO to process) an application. Confidentiality is provided by 35 U.S.C. 122 and 37 CFR 1.14. The collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1458, Alexandria, VA 22313-1458. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1458, Alexandria, VA 22313-1458.

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Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/802,615
				Filing Date	March 16, 2004
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				Art Unit	2167
				Examiner Name	Susan F. Rayyan
Sheet	2	Of	2	Attorney Docket Number	27763-703.301

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T*
	21.	FARQUHAR, Adam et al. May 14, 1997. The ontolingua server: a tool for collaborative ontology construction. <i>Stanford University</i> . Pages 1-22.	
	22.	BLASCHKE, C., et al. 1999. Automatic extraction of biological information from scientific text: protein-protein interactions. <i>Proc Int Conf Intell Syst Mol Biol</i> . 60-7.	
	23.	KARP, P.D., et al. 2000. HinCyc: A knowledge base of the complete genome and metabolic pathways of <i>H. influenzae</i> . <i>Proc Int Conf Intell Syst Mol Biol</i> . 4: 116-24.	
	24.	CHAUDHRI, et al. 1998. OKBC: A programmatic foundation for knowledge base interoperability.	
	25.	RINDFLESCH, et al., "Extracting molecular binding relationships from biomedical text," presented May 2, 2000 at the <i>Sixth Applied Natural Language Processing Conference</i> from 4/29/00-5/4/00 in Seattle, Washington	
	26.	HAFNER, "Ontological Foundations for Biology Knowledge Models," 4th International Conference, on Intelligent Systems for Molecular Biology, Jun. 12-15, 1996 at Washington University in St. Louis, Missouri.	
	27.	SEKIMIZU, T., et al. 1998. Identifying the Interaction Between Genes and Gene Products Based on Frequently Seen Verbs in Medline Abstracts. <i>Genome Inform Ser Workshop Genome Inform</i> . 9: 62-71.	
	28.	THOMAS, J., et al. 2000. Automatic Extraction of Protein Interactions from Scientific Abstracts. <i>Pacific Symposium on Biocomputing</i> . 541-52.	
	29.	Newswire Association Inc., On-line Tests Give Instant Feedback on Office Skills, February 14, 1998.	
	30.	Business Week, Saturn: GM finally has a real winner. But success is bringing a fresh batch of problem, August 17, 1992, McGraw-Hill Co. Inc., pg. 86, number 3279.	

Examiner Signature	Date Considered
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*EXAMINER: Initial of reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. *Applicant's unique citation designation number (optional). *See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. *Exam Office that issued the document, by the two-letter code (WIPO Standard ST 3). *Year (ignore patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document). *Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST 16 if possible. *Applicant is to place a check mark here if English language Translation is attached.

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